## SOME UNUSUAL BUTTERFLY RECORDS TAKEN IN SCOTT COUNTY, KANSAS.

By Virgil F. Calkins, Scott City, Kansas.

For a period of about 15 days during the latter part of the month of June and the fore part of July the author took several new species and forms of butterflies not previously recorded from Kansas. A list of these species are as follows:

Papilio idaeus Fab. & 6/29/35; Leptotes theonus floridensis Morr. Q 7/4/35; Phoebis argante Fab. Q 7/2/35; Papilio thoas nealces R. & J. & Q 7/5/35; Pieris monuste L. & 7/6/35; Chiomara asychis Cram. & 7/6/35; Anartia jatrophae Joh. & 7/11/35; Athena petreus Cram. & (syn. Megalura peleus Sulz.) 8/6/35. A specimen of Timetes chiron Fabr. was observed July 2 feeding on Alfalfa; it escaped the edge of the net frame and was not captured.

Due to the climatic conditions prevailing at the time of capture of the above unlocal species, perhaps a bit of explanation would not seem out of place. During the period of time in which most of the above were taken, severe wind storms prevailed almost continually from the South in the Great Plains section. Scott County, Kansas, incidentally, was one of the counties in west Kansas that suffered so severely from dust earlier in the spring in the "dust-ridden" territory commonly referred to throughout the nation as the "great dust bowl."

Belated spring showers, not falling until June after the dust plague had ceased, brought out many late flowers that in normal seasons would have blossomed in May when the dust storms were at their height, and held in check the growth of all vegetation throughout the territory referred to as the "dust bowl," which comprised, largely, the entire Great Plains section of central United States.

The first capture of note was a member of the genus *Papilio*. As it was not figured by Dr. Holland in his last work, the specimen was sent to Lawrence, Kansas, for identification, and through the kindness of Mr. William D. Field who made comparisons with plates and data in SEITZ, the insect proved to represent a male specimen of *Papilio anchisiades idaeus* F. (*pandion Fldr.*,—*pandonius* Stgr.). In Seitz' work, *idaeus* F. is given as a race of the species *Papilio anchisiades*.

Dr. Holland, in the revised edition of "The Butterfly Book," mentions that a single stray specimen of *P. idaeus* Fabr. (pandion Felder) is in the possession of a collector at Marfa, Texas, seventy

miles north of the Mexican boundary. He further says that on the strength of such a unique specimen, we might regard the species as a straggler in our southern territory, but in his opinion he evidently did not put much credence in it as it was a wind blown specimen, and, as such, was hardly entitled to be listed as a species in our boreal fauna for this reason.

Personally, I can see no good reason why a wind blown species should not be given a place in our fauna, or in check lists. is no doubt but what many neotropical forms now listed in our boreal region from extreme southern points are only occasional to our southern boundaries, and are not known, positively, to breed within our region. There is, however, the strong possibility that such wind blown species brought northward on the brunt of a high wind could find identical, or similar, food plants upon which to exist and should climate and other factors be in their favor, could they not eventually become domiciled? The common Monarch, Danais plexippus L., for example, cannot survive the rigors of winter in our northern climate, but it comes northward to us in spring and finds suitable vegetation upon which to lay eggs for one or more broods before cold weather kills off the existing adults or they are forced to migrate southward to warmer climes. Perhaps some of the stray neotropical forms now included in our nearctic, or boreal, list may only occur in one or two summer broods, the advent of cold weather making it impossible for the development of more. If, in order to include a species in our fauna, it should first be proved to breed within our region, as Dr. Holland's opinion seemingly would indicate, I believe that many of our extreme southern forms would have to be questioned as the earlier stages of some of them are not, as vet, fully known.

The effect of wind on the occurrence of Lepidoptera is a subject not fully appreciated—especially as it concerns the species and forms to be found at various times in the Great Plains Region, and it should be more generally studied elsewhere for what bearing it might have in regard to general distribution records in other

regions.

The following species and forms previously recorded from Scott County perhaps owe their occurrence to the force of the wind: Papilio daunus Bdv.; Papilio brucei Edw.; Papilio hollandi Edw.; Ascia amaryllis josepha G. & S.; Phoebis philea Joh.; Aphrissa statira jada butleri Scud.; Anteos clorinde Godt.; Kricogonia lyside Godt.; Heliconius charithonius L.; Phyciodes vesta Edw.; Anthanassa texana seminole Skin.; Chlosyne lacinia adjutrix Scud.;

Mestra amymone Men.; Victorina steneles L.; Anaea morrisoni Holl.; Grais stigmaticus Mab.; Copaeodes aurantiaca Hew.; Amblyscirtes nysa Edw.; Thanaos funeralis Scud. & Burg.; and Lerodea eufala Edw.

Of these species, only badly tattered stray specimens have been taken with the exception of A. statira jada butleri, K. lyside, P. vesta, A. texana seminole, A. nysa, T. funeralis, and Ler. eufala, of which from I to 6 specimens each have been taken the past two or three years, some of them in excellent condition, which would seem to indicate that some of them may not be wind blown entirely.

## A NEW ECITOPHILOUS NORTH AMERICAN PHORID FLY.

By Charles T. Brues, Biological Laboratories, Harvard University

In the American Naturalist for May 1902¹ the present writer published an account of a very remarkable subapterous phorid fly from nests of *Eciton opacithorax* near Austin, Texas. This was described as *Xanionotum hystrix*, and formed the type of a new genus, of which the male was at that time unknown. For many years no further species of this genus were discovered, until in 1923 when Borgmeier² described a Brazilian phorid as *Schmitzia* (type, *S. spiniceps*) which has been considered a synonym of *Xanionotum* by both Borgmeier and Schmitz. Further, in 1924 Borgmeier added *Ecitocantha* which has likewise been suppressed as another synonym of *Xanionotum*. In a review of the genus published in 1932³ Borgmeier includes ten species of *Xanionotum*, all from Brazil and Mexico, except the single Texan form.

Recently I was very much surprised to receive from Professor M. R. Smith of the Mississippi State College two specimens of a species of *Xanionotum* which he collected last spring with *Eciton schmitti* in Mississippi. These appear to represent an undescribed species, most closely related to the Brazilian *X. wasmanni* Schmitz and the Texan *X. hystrix* Brues. It is a great pleasure to be able

<sup>&</sup>lt;sup>1</sup> Vol. 36, p. 376.

<sup>&</sup>lt;sup>2</sup> Zeits. Deutscher Ver. Wiss. u. Kunst, São Paulo, Jahrg. 3, p. 168.

<sup>&</sup>lt;sup>3</sup> Revista Entom., vol. 2, pp. 369–380.